

What is claimed:

1. A shock-absorbing, tilt-controlling system for a vehicle having a transverse axle and a body that comprises, on at least one side of the vehicle, a first chamber having two ends, said chamber at least partially filled with hydraulic fluid; a movable piston at one end of the chamber attached to said transverse axle; the other end of said first chamber being attached to said body of said vehicle, said other end of said chamber having an opening through which fluid can flow; a second chamber at least partially filled with hydraulic fluid, having bottom and top ends, remotely mounted from said first chamber; an opening in the bottom end of said second chamber; means for communicating between the openings in said first and second chambers and, within which means, hydraulic fluid is moved from said first chamber to said second chamber; a lockplate mounted within and attached to the walls of said second chamber, said lockplate having at least one opening separating the fluid within said second chamber into two portions; a movable sealing means within said second chamber which, when activated, seals the at least one opening in said lockplate; means for moving the sealing means to seal the opening in said lockplate; means for sensing the tilting movement of said vehicle, combined with the means for moving said sealing means to seal the opening when said sensing means is activated at a set tilt position of said body to prevent flow of said fluid from one portion of said chamber into the other portion of said chamber and thus prevent further movement of said piston in said first chamber and further tilting of said body of said vehicle.

2. A shock-absorbing, tilt-controlling system as in Claim 1, wherein dampening means are placed in the first chamber.

3. A shock-absorbing, tilt-controlling system as in Claim 2, wherein said dampening means are placed in the first chamber either above the piston or attached to the upper surface of said piston.

~~51~~ 4. A shock-absorbing, tilt-controlling system for a vehicle having a transverse axle and a body that comprises, on at least one side of the vehicle, a first chamber having two ends, said chamber at least partially filled with hydraulic fluid; a movable piston at one end of the chamber attached to said transverse axle; the other end of said first chamber being attached to said body of said vehicle, said other end of said chamber having an opening through which fluid can flow; a second chamber at least partially filled with hydraulic fluid having bottom and top ends, remotely mounted from said first chamber; a floating piston

within said second chamber separating a compressible gas in the upper, closed end of said second chamber from said hydraulic fluid in said second chamber; an opening in the bottom end of said second chamber; means for communicating between the openings in said first and second chambers and, within which
5 means, hydraulic fluid is moved from the said first chamber to the bottom surface of the floating piston in said second chamber; a lockplate mounted within and attached to the inner walls of said second chamber, said lockplate having at least one opening separating the fluid within said chamber into two portions; a movable sealing means within said second chamber which, when activated, seals the at
10 least one opening in said plate; means for moving the sealing means to seal the opening in said plate; means for sensing the tilting movement of said vehicle, combined with the means for moving said sealing means to seal the opening when said sensing means is activated at a set tilt position of said body to prevent flow of said fluid from one portion of said chamber into the other portion of said
15 chamber and thus prevent further movement of said piston in said first chamber and further tilting of said body of said vehicle.

~~6.5~~ A shock-absorbing, tilt-controlling system as in Claim ~~4~~ ⁵
wherein dampening means are placed in the first chamber.

~~7.6~~ A shock-absorbing, tilt-controlling system as in Claim ~~5~~ ⁶
20 wherein said dampening means are placed in the first chamber either above the piston or attached to the upper surface of said piston.

~~4.1~~ A shock-absorbing, tilt controlling system as in Claim 1,
wherein a pressure relief valve is placed within the lockplate to permit fluid to flow through the lockplate at a pre-set pressure without de-activating the sensing
25 means that has been activated to prevent fluid flow through said at least one opening at a said pre-set tilt position of said body, to moderate the movement of said piston and the tilting of said body.

8. A shock-absorbing, tilt controlling system as in Claim ~~4~~ ⁵,
wherein a pressure relief valve is placed within the lockplate to permit fluid to flow
30 through the lockplate at a pre-set pressure without de-activating the sensing means that has been activated to prevent fluid flow through said at least one opening at said pre-set tilt position of said body to moderate the movement of said piston and the tilting of said body.